UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/648,653	08/22/2003	John Johnston	2369.000004	3867

21917 7590 12/15/2004

MCHALE & SLAVIN, P.A.
2855 PGA BLVD
PALM BEACH GARDENS, FL 33410

EXAMINER	
HUANG, SIHONG	
ART UNIT	**PAPER NUMBER**
2632	

DATE MAILED: 12/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/648,653	JOHNSTON, JOHN	
	Examiner	Art Unit	
	Sihong Huang	2632	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 August 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *11/28/03*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to because:

Heat sensors are not shown in the drawing. And, the structural elements are merely labeled with identifying numbers (see Fig. 1). Since these elements are illustrated as blank boxes and/or circles which do not correspond to well known graphical representations, applicant is required to provide suitable legends under 37 C.F.R. 1.83(a) and 1.84(g).

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites both "heat sensors" in line 2 and "at least two temperature sensors" in lines 7-8. However, as disclosed in the abstract and the summary of the present invention, heat sensors are temperature sensors (12, 13). Therefore, the interchange use of "heat sensors" and "temperature sensors" in a single claim creates confusion and ambiguity. Applicant should make appropriate correction in order to maintain consistent use of claim terminology.

In claim 1, line 14, the phrase "said one of said group" is confusing since there is only one group recited. It should be changed to "said one of said group of vehicle components".

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claim 1 (as best understood by examiner in view of above 112 2nd rejection) is rejected under 35 U.S.C. 102(b) as being anticipated by Weissbrich et al. (US 5,259,814).

Weissbrich et al disclosed a system for signaling a higher than preset interior temperature of a vehicle including heat sensors or temperature sensors (1, 2) in said vehicle (see Fig. 1) and a control head (16) activated when a preset temperature (for example, the upper threshold value, temperature T_{UT}) is exceeded (for example, step S9 in Fig. 3), said control head activating one of a group of vehicle components consisting of a fan, horn, siren, emergency lights, headlights, windows, or engine (in this case, activating one of the fan, roof window or AC, steps S12-S15 in Fig. 3), improvement comprising said control head having microprocessor (col. 3, lines 40-42) connected to at least two temperature sensors (interior temperature sensors 1 and 2), said temperature sensors (1, 2) widely dispersed in the passenger areas of said vehicle (col. 3, lines 24-30), each of said temperature sensors sending local temperature data to said microprocessor (col. 1, lines 55-57), said microprocessor computing an average of said temperature data from said at least two temperature sensors (col. 2, lines 52-57), comparing said average with said preset temperature (upper threshold temperature) and activating said one of said group of vehicle components (for example, activating one of fan, ac or roof window, see col. 1, line 58 to col. 2, line 6, etc.).

6. Claims 12 and 16 are rejected under 35 U.S.C. 102(e) as being anticipated by Rackham et al. (US 2003/0222775 A1).

Rackham et al disclosed an alarm system for installation in the interior of a vehicle (pp14) to indicate the existence of an unhealthy temperature, said system comprising a microprocessor (pp 0021, lines 6-7, pp 0025, lines 5-6 and pp 0028, lines 3-4), said microprocessor connected to a temperature sensor (22) adapted to be placed in the vehicle, said microprocessor programmed with a temperature alarm threshold (appropriate temperature limits,

pp 0025, lines 9-10, pp 0028, lines 8-11), said microprocessor programmed to issue an alarm command (18) adapted to energize vehicle components to emit visual (32) and aural signal (34) when said alarm threshold is exceeded (when outside the appropriate temperature limits or range), said microprocessor having a programmed time delay mode (214, pp0025, lines 5-10), said programmed time delay mode preventing an immediate command upon initial activation of the system when the vehicle temperature exceeds said alarm threshold (see steps 212, 214, 230, and pp0027, lines 5-8).

Regarding claim 16, the microprocessor issues said alarm command (step 230) to a portable device, said portable device indicating an alarm command has been received (pp 0030 disclosed that a cellular phone or a portable computer can be used to send the alarm, therefore, the alarm can be received by a portable device such as cellular phone or a portable computer).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 2 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weissbrich et al. (US 5,259,814) in view of Teague (US 5,793,284).

Weissbrich et al differ from claim 2 in that Weissbrich et al do not disclose a visual display for displaying the temperature. However, Teague, from the same field of endeavor, teaches a similar alarm system wherein a display 21 is provided for displaying the sensed temperature (col. 4, lines 54-56). Based on this teaching, it would have been obvious to a person

having ordinary skill in the art at the time of the invention to incorporate a display device as taught by Teague to the system of Weissbrich et al in order to notify the user of the sensed temperatures for appropriate adjustment if desire.

Regarding claim 9, Weissbrich et al differ from claim 9 in that Weissbrich et al do not disclose battery power monitoring means and reporting the battery status to a portable electronic unit. However, Teague further teaches a power monitoring unit 15 and reporting power status to a portable electronic unit 28 (col. 4, line 65 to col. 5, line 2). Based on this teaching, it would have been obvious to a person having ordinary skill in the art at the time of the invention to apply the teaching of Teague to the system of Weissbrich et al in order to allow the system to monitor the temperature as well as the battery of the vehicle for the additional monitoring feature/advantage.

9. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Weissbrich et al (US 5,259,814) in view of Rackham et al (US 2003/0222775 A1).

Weissbrich et al differ from claim 3 in that Weissbrich et al do not disclose providing a time delay to delay the activation of said one of said group of vehicle components. However, as discussed above, Rackham et al, from the same field of endeavor, teach a similar alarm system, wherein a delay period (step 214) is provided to delay the activation of the vehicle components (such as flashing lights 32, horns or sirens 34, see steps 214, 230). As both Weissbrich et al and Rackham et al disclosed a microprocessor based alarm system, it would have been obvious to a person having ordinary skill in the art at the time of the invention to program the microprocessor or computer of Weissbrich et al with a delay period as taught by Rackham et al in order to allow

the user or system to take appropriate actions such as adjusting temperature by turn on AC or opening window, etc. prior to activate the alarm (see pp0028, lines 18-24 of Rackham et al).

10. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Weissbrich et al (US 5,259,814) in view of Rackham et al (US 2003/0222775 A1) as applied to claim 3 above, and further in view of Dulin et al. (US 2002/0161501 A1).

The modified system of Weissbrich et al and Rackham et al differ from claim 4 of the present invention in that it does not disclose a manually restarting the time delay period to provide additional time. However, Dulin et al, from the same field of endeavor, teach a similar alarm system. Dulin et al further teach a manual reset push button for resetting the system (pp 0073, lines 6-8 and step 130, note that the reset restarts the system, and therefore, the delay is restarted in turn will provide additional time). Based on the teaching, it would have been obvious to a person having ordinary skill in the art at the time of the invention to incorporate a manual reset as taught by Dulin et al to the modified system of Weissbrich et al and Rackham et al in order to allow an operator or system to have more time to take appropriate actions.

11. Claims 5-7, 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weissbrich et al (US 5,259,814) in view of Van Bosch et al (US 2003/0098784 A1) .

Weissbrich et al differ from claims 5-7, 10 and 11 of the present invention in that Weissbrich et al do not disclose reporting the alarm to a remote portable electronic unit or controlling the system by the remote portable electronic unit. However, Van Bosch et al teach such (112, pp 0022, lines 11-14 and pp 0036). Based on this teaching, it would have been obvious to a person having ordinary skill in the art at the time of the invention to apply the

teaching of Van Bosch et al to the system of Weissbrich et al in order to allow remote monitoring and controlling.

12. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Weissbrich et al (US 5,259,814) in view of Van Bosch et al (US 2003/0098784 A1) and Rodriguez (US 6,496,106 B1).

The modified system of Weissbrich et al and Van Bosch et al further differ from claim 8 in that it does not disclose one of the monitoring conditions is to indicate the engine is inoperative. However, Rodriguez teaches such (col. 3, lines 62-63). Based on this teaching, it would have been obvious to a person having ordinary skill in the art at the time of the invention to apply the teaching of Rodriguez to the modified system of Weissbrich et al and Van Bosch et al in order to allow the user to know whether or not the engine is on prior to activate the engine for providing power to other vehicle components to adjust unhealthy condition insider the vehicle.

13. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rackham et al (US 2003/0222775 A1) in view of Thornton (US 5,793,291).

Rackham et al disclosed the alarm system as disclosed above and further disclosed issues a pre-alarm command (output of step 212) after a preset time interval (214) from initial activation, said pre-alarm command indicates temperature remains above said alarm threshold (step 212, pp 0028, lines 24-27) and further differ from claim 13 in that Rackham et al do not disclose the pre-alarm command includes an additional time period. However, Thornton similarly teaches an alarm system wherein a second time delay was provided prior to activation of the alarm (col. 4, lines 26-28 and col.3, lines 3 and 50-55). Based on this teaching, it would

have been obvious to a person having ordinary skill in the art at the time of the invention to incorporate another time delay period as taught by Thornton right after step 212 of Rackham et al in order to allow more time for an operator to take actions.

14. Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rackham et al. (US 2003/0222775 A1) in view of Dulin et al. (US 2002/0161501 A1).

Rackham et al differ from claim 14 of the present invention in that Rackham et al do not disclose a manual rest switch. However, Dulin et al, from the same field of endeavor, teach a similar alarm system. Dulin et al further teach a manual reset push button for resetting the system (pp 0073, lines 6-8 and step 130, note that the reset restarts the system, and therefore, the delay is restarted). Based on this teaching, it would have been obvious to a person having ordinary skill in the art at the time of the invention to incorporate a manual reset as taught by Dulin et al to the system of Rackham et al in order to allow an operator of the system of Rackham et al to reset the system.

Regarding claim 15, Rackham et al differ from this claim in that Rackham et al do not disclose the microprocessor is programmed to issue an alarm command adapted to energize vehicle components to introduce ambient air when said alarm threshold is exceeded. However, Dulin et al, from the same filed of endeavor, teach such. Dulin et al similarly teach an alarm system wherein the control unit 12 issues rescue output signals to energize vehicle components (AC, fan, opening windows, etc., pp0014, lines 10-20). Based on this teaching, it would have been obvious to a person having ordinary skill in the art at the time of the invention to program the processor of Rackham et al with the teaching of Dulin et al in order to allow the alarm system

of Rackham et al to automatically adjust the temperature (for example, by turn on the AC, fan or opening windows) inside the vehicle when unhealthy temperature inside the car is detected.

15. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rackham et al. (US 2003/0222775 A1) in view of Losey (US 2002/0109583 A1).

Rackham et al differ from claim 17 in that Rackham et al do not disclose the portable device corresponds with said microprocessor to activate a vehicle component. However, Losey, from the same field of endeavor, teaches a similar alarm system. Losey further teaches (pp0023, lines 16-18) that a portable device can be used to activate a vehicle component (or to do remote control from the portable device). As Rackham et al teach sending alarm condition to a portable device, it would have been obvious to a person having ordinary skill in the art at the time of the invention to apply the teaching of Losey to the system of Rackham et al in order to not only allow the system of Rackham et al to remotely receive alarm status but also to provide the additional advantage of allowing an operator to remotely control the system of Rrackham et al.

16. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rackham et al. (US 2003/0222775 A1) in view of Tegge et al. (US 6,252,406 B1).

Rackham et al disclosed an alarm system as discussed above and further differ from claim 18 in that Rackham et al do not disclose power or battery monitoring means. However, Tegge et al teach power measurement or monitoring means for powering the battery conditions of the battery (col. 3, lines 3-9 and lines 17-25). Tegge et al further teach to turn on the computer periodically ("short duration") to perform some functions and the rest of the time (e.g., "rest period", the computer is placed in sleep mode in order to conserve battery power). Based on this teaching, it would have been obvious to a person having ordinary skill in the art at the

time of the invention to incorporate a battery monitoring means and method as taught by Tegge et al to the system of Rackham et al in order to monitor the battery or power source of the alarm system of Rackham et al in order to ensure there is enough power remained for reporting the alarm condition and to save power.

17. Claims 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rackham et al (US 2003/0222775 A1) in view of Tegge et al (US 6,252,406 B1) as applied to claim 18 above, and further in view of Van Bosch et al (US 2003/0098784 A1).

The modified system of Rackham et al and Tegge et al differs from claims 19 and 20 of the present invention in that it does not disclose reporting the alarm to a remote portable electronic unit or controlling the system by the remote portable electronic unit. However, Van Bosch et al teach such (112, pp 0022, lines 11-14 and pp 0036). Based on this teaching, it would have been obvious to a person having ordinary skill in the art at the time of the invention to apply the teaching of Van Bosch et al to the modified system of Rackham et al and Tegge et al in order to allow remote monitoring and controlling the alarm system.

Conclusion

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Prior art references Lee et al (US 6,639,512 B1), Rossi (US 6,104,293), Moskowitz et al. (US 2002/0145516 A1) and Reeley (US 6,166,627) are cited to show other vehicle alarm/monitoring systems utilizing temperature sensor(s) positioned in the vehicle.

Prior art reference Parsonage (US 6,037,749) is cited show a battery monitoring system.

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sihong Huang whose telephone number is 571-272-2958. The examiner can normally be reached on Mon, Thu & Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel J. Wu can be reached on 571-272-2964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sihong Huang
December 6, 2004